

ABSTRACT

A phased array antenna includes a plurality of radiating elements arranged as orthogonal pairs in a herringbone pattern. Each radiating element includes multiple microstrips disposed conformally on a planar substrate. Each
5 radiating element includes a dipole formed as a pair of dipole microstrips extending from a pair of launch points. Each dipole microstrip extends between one launch point of the pair of launch points and a top loading microstrip, which provides a capacitive load to the dipole. The top loading microstrip extends between parallel microstrips, which provide an additional capacitive load to the dipole.